Sahana
Software Foundation

Sahana Software Foundation Free & Open Source Disaster Management Projects

Sahana Software provides an integrated set of web-based disaster management applications that provide solutions to large-scale humanitarian problems in the aftermath of a disaster.

> *The Mission of the Sahana Software Foundation is to help alleviate human suffering by giving emergency managers, disaster response professionals, and communities access to the information that they need to better prepare for and respond to disasters through the development and promotion of free and open source software and open standards*

How can Sahana help manage a large scale sudden-onset disaster?

Sahana helps bring efficiencies to disaster response coordination and facilitates effective information exchange:

- Reduces **trauma** by finding missing people and reuniting families efficiently.
- Ensures every person/camp reported and is effectively **tracked.**
- **Manages a**nd tracks all the requests from the victims and camps.
- **Connects** donors, volunteers, NGOs, and government organizations, enabling them to operate as one.
- Tracks **coverage** and **balances** the distribution of aid and supplies.
- Provides **transparency** of relief effort.

> *"No innovation matters more than that which saves lives"*
> **Avelino J. Cruz, Jr., Secretary of National Defense of the Philippines on the use of Sahana following disastrous mudslides in 2005**
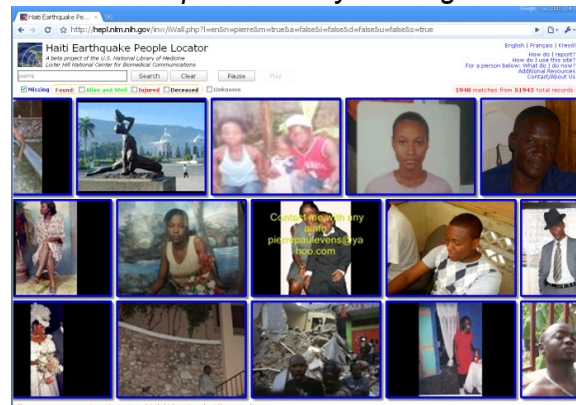
Sahana Project Trigger: 2004 Asian Tsunami

- At least **226,000 dead**
- Up to **5 million** people lost homes, **or** access to food and water
- **1 million** people left without a means to make a living

The trauma caused by waiting to be found or by trying to find the next of kin...

- "Please help me find my missing child"

Sahana Haiti Earthquake People Locator, January 2010

Sahana Missing Person Registry
A centralized bulletin board of missing and found people with a special emphasis on accounting for family reunification.

Managing the multitude of requests from the affected regions and matching them effectively to pledges of assistance...

- "We need 600 tents, not clothes!"
- "We have antibiotics, how much do you need and where can we send them?"

Sahana Request Management System

A system to coordinate the specific requests for assistance coming in from the disaster area and matching them up with available resources.

Coordinating all the aid groups and helping them to operate effectively as one...
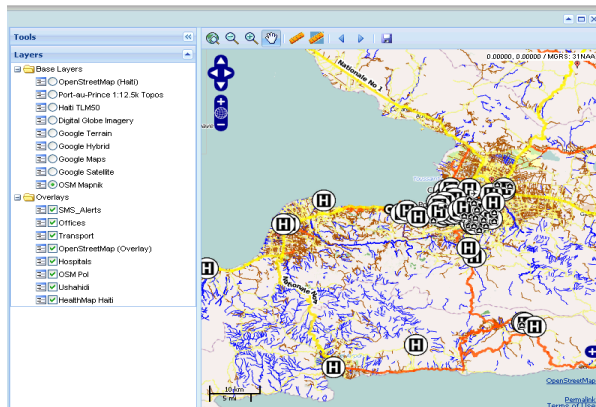
- *"We are an NGO providing medical services. How can we help?"*

- *"As the authorized relief coordinator how do I utilize all these NGOs and volunteers?"*

Sahana Organization Registry

Keeps track of all organizations involved in the relief effort including their contact information, services provided, operational areas. Reports the coverage of relief services in the affected region.

Tracking the location of all important places

- *"No aid is being sent to this village, they have forgotten us as we are off the beaten path"*

- *"Where are the temporary shelters, camps and hospitals located? How do I contact them?"*

Sahana's Haiti Situational Awareness Map, February 2010

Location Registry

A System that keeps track of the details of temporary shelters, hospitals, relief distribution centers, and other important locations to help assure a balanced distribution of aid.

Other Sahana Modules

Volunteer Management, Hospital Management, Disaster Victims Registry, Disaster Victims Identification, CAP and SMS Alerts, Inventory and Logistics Management, Situational Awareness, Mobile Platform Data Collection.

Because it is FOSS

1. It is **affordable**. Given limited budgets and resources, many jurisdictions cannot afford to invest in disaster management systems for events that may or may not happen.

2. There are **no restrictions** or royalties to deploy and modify

3. It is an open system - **transparent** and trustworthy. Better acceptance than "foreign" or proprietary systems.

4. Rapid **integration** & localization through access to source code

5. The global Sahana community has committed **volunteers** providing "goodwill" resources in times of crisis.

6. Sahana code is freely available under the **LGPL** and **MIT** licenses.

Sahana In Action

- Tsunami, Sri Lanka 2004
- Kashmir Earthquake, Pakistan 2005
- Landslides, Philippines 2006
- Yogjakarta Earthquake, Indonesia – 2006
- Cyclone Sidr, Bangladesh – 2007
- Ica Earthquake, Peru – 2007
- Coastal Storm Plan, New York City – 2007-*
- Bihar Floods, India – 2008
- Chengdu-Sitzuan Earthquake, China – 2008
- Cyclone Nargis, Myanmar – 2008
- Cyclones, Philippines – 2009
- Cyclones, Indonesia – 2009
- Bethesda Hospitals Emergency Preparedness Partnership, United States National Library of Medicine - 2009-*
- Earthquake, Haiti – 2010
- Earthquake, Chile - 2010
- Taiwan – 2010-*
- Vietnam – 2010-*
- Floods, Guatemala – 2010
- Sri Lanka – 2010-*

* ongoing pre-disaster preparedness deployments

Demo at:
http://Demo.SahanaFoundation.org